

CLASS EXERCISES

1. What is the additive inverse of $\frac{a}{b}$, $b \neq 0$?
2. What is the multiplicative inverse of $-\frac{a}{b}$, $a \neq 0$, $b \neq 0$?

Algebra 2
Unit #1
WS #2

Find the additive inverse and the multiplicative inverse for each number.

3. -3 4. $\frac{1}{3}$ 5. 7 6. -0.9

Perform the indicated operation.

7. $-4 + (-7)$ 8. $-4 + (7)$ 9. $-12 - (-3)$ 10. $-42 - (3)$
11. $5(-4)$ 12. $-7(-8)$ 13. $-36 \div (4)$ 14. $-12 \div (-2)$

Simplify.

15. $|- \frac{1}{3}|$ 16. $-|-25|$ 17. $0.2|-8|$ 18. $-4|12|$
19. $3|7 - 10|$ 20. $5|-6 + 10|$ 21. $|-4| + |-3.54|$ 22. $|5| - |-7|$
23. 6^2 24. $(-3)^2$ 25. 2^5 26. $(-4)^3$

PRACTICE EXERCISES

Find the additive inverse and the multiplicative inverse for each number.

1. 23 2. -3.8 3. -5 4. π
5. $3\frac{2}{5}$ 6. -4 7. $\frac{6}{7}$ 8. $-\frac{9}{5}$

Perform the indicated operation.

9. $86 + (-28)$ 10. $-11.2 + (-8.3)$ 11. $78 - (-23)$ 12. $-37 - (-29)$
13. $(-1.7)(7)$ 14. $(-25)(-8)$ 15. $73.2 \div (-1.2)$ 16. $-144 \div (-9)$
17. $(-2)(-3)(0)(-2)$ 18. $(-5)(8)(-4)(-2)$
19. $-10 + (14) + (-19) + (-20)$ 20. $-20 + (-16) + (18) + (30)$
21. $\frac{3}{8} + (-\frac{1}{2})$ 22. $(-\frac{2}{3}) + (-\frac{1}{3})$ 23. $(-\frac{3}{5})(-\frac{5}{3})$
24. $(-\frac{7}{10})(\frac{5}{14})$ 25. $(-\frac{5}{12}) \div (-2)$ 26. $(\frac{9}{16}) \div (-\frac{1}{2})$

Simplify.

27. $|-2| + |13| + |37| + |-12|$ 28. $2|5| + 3|-7| - |-12|$
29. $|23 - 12| + |37 - 52| + |-65|$ 30. $2|12 - 5| + 7|7 - 9| - 7|6 - 12|$
31. $(|-3| + |7| - |6|)(5|2| - |-7|)$ 32. $(|7 - 8| + |7|)(3|-4| - |5 - 9|)$
33. $|\frac{-3}{2}| + |\frac{-7}{3}|$ 34. $-3|5 - 10| - 4|5 - 12| + 7|4 + 14|$
35. $\frac{|3||-2| + |-7||3| - |15||-5|}{16}$ 36. $\frac{|8 - 2|}{3} + \frac{|6 - 9|}{3} - \frac{|7 + 3|}{2}$
37. $(4 - 14)^2$ 38. $5^2 \cdot 0$ 39. $(3 \cdot 4)^2$ 40. $(-7 - 2)^2$
41. $|-3|^2$ 42. $|3 - 5|^3$ 43. $(|5 - 6| + |-1|)^4$ 44. $|4|^2 - |3|^3$